

Lesson 5 Fungi notebook.notebook

Fungi

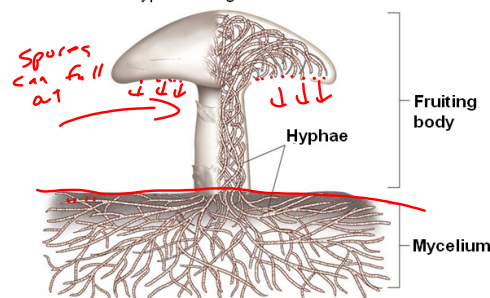
<https://www.youtube.com/watch?v=dj9m7Oc36wM>

https://www.youtube.com/watch?v=4NO299do_l4

<https://www.youtube.com/watch?v=Luxjo0AsbTY>

- multicellular (except for yeast)
- heterotrophic
- eukaryotic
- stationary = sessile
- cells walls made of chitin – like shellfish
- they breakdown their food externally and absorb it - saprobies
- excess food is returned to the environment - why we need them = decomposer
- body is made up of threads called hyphae
- a mass of hyphae is called the mycelium

Structure of a Typical Fungus



http://www.youtube.com/watch?v=dM_g_p4h6CM

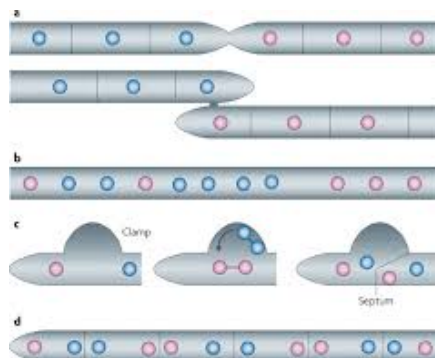
Fungi can reproduce asexually in 2 ways

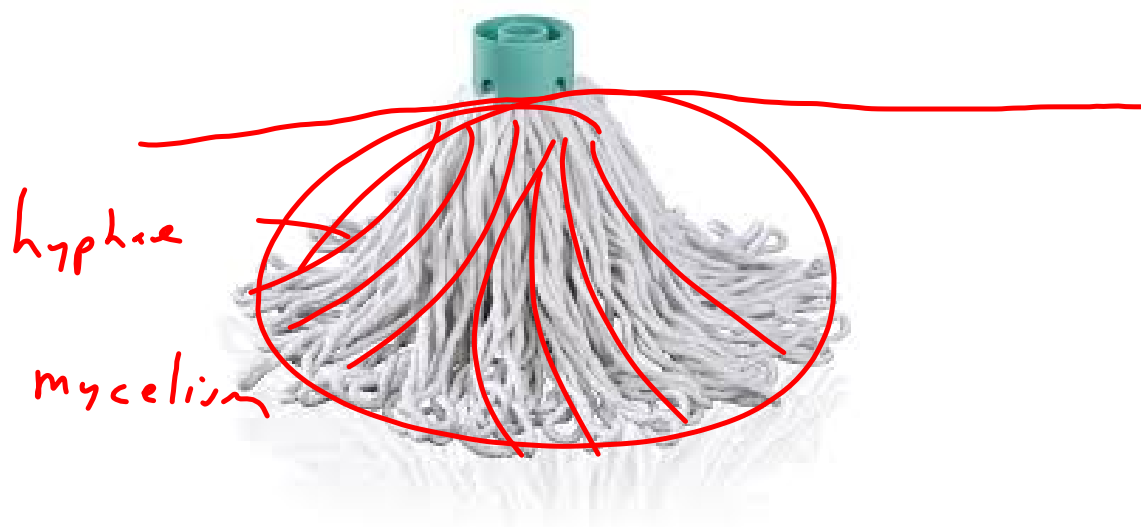
1. Asexual reproduction occurs when hyphae break off and begin to grow on their own.
2. Some fungi produce spores, which scatter and grow. In some fungi, spores are produced in structures called **sporangia**.

Sporangia are at tips of specialized hyphae called **sporangiophores**.

Sexual reproduction involves two mating types: "+" (plus) and "-" (minus).

Hyphae of opposite mating types meet and fuse, bringing "+" and "-" nuclei together in one cell.





4 groups of Fungi (A/B/D/Z)

- 1) Ascomycota (Sac Fungi) ^{Cup}
- look like a cup
- spores are found in a structure called the ascus which is found in the base of the cup.
- yeast belong to this group – only unicellular Fungus
- can grow anaerobically (without O₂) in a sugar rich environment
- produce carbon dioxide and alcohol as they respire (ferment)



- 2) Basidiomycota (club fungi – mushrooms, puffballs, etc.)
- spores are produced on the basidia which are found on the gills on the underside of the cap
- great decomposers



<http://www.youtube.com/watch?v=n99zZ4nbunE>

- 3) Deuteromycota
- called the imperfect fungi because little is known about them – especially how they reproduce sexually
- have characteristics that could put them in the other groups
- penicillin belongs to this group

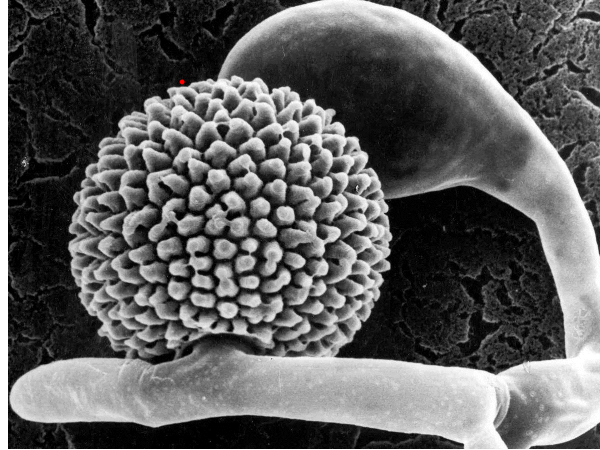


<http://www.youtube.com/watch?v=DhGIpLE89Vg&feature=related>



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- 4) Zygomycota – common mold found on bread, cheese, etc.
- they have a zygospore at the tip of their hyphae



If a fungus grows on a living organism the fungus is known as a parasite

Ex. Wheat Rust



- athletes foot/ ringworm grow on humans



- not a worm but a fungus that grows in a circle

Most fungi are not parasitic just great decomposers that return nutrients to the environment

Fungi sometime live symbiotically with another organism/helping each other survive

- Ex. Fungus + Algae = Lichen
 - Fungus provides water and minerals
 - Algae provides O₂ and nutrients



Review Questions:

Page 545: 1-3,5-12,14-16,20,22-24.

These are not compulsory